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AMERICAN JOURNAL
OF
PHOTOGRAPHY

AN ILLUSTRATED MONTHLY,
DEVOTED TO PHOTOGRAPHY
IN ITS WIDEST SENSE

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ON THE LYCOMING—IN CRESCENT GAP

NEGATIVE BY WILLIAM H. RAU

AMERICAN JOURNAL OF PHOTOGRAPHY

AUSTIN C. LEEDS, *Publisher*
JOHN BARTLETT, *Editor*

VOL. XIX.

JANUARY, 1899.

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ANNOUNCEMENT.

THE AMERICAN JOURNAL OF PHOTOGRAPHY will hereafter be conducted and published by Austin C. Leeds, while the editorial department will continue under the direction of John Bartlett.

As the present management is independent of all controlling trade influence, ample scope and opportunity is afforded to discuss the interests of Photography on broad and liberal principles. Neither labor nor reasonable expense will therefore be spared to secure whatever is of value—scientific, technic, mechanic and artistic—to the expert or beginner.

The Journal having had years of experience and intimate knowledge of what is needed by the workers in the profession, will venture out on new and improved lines and will undertake, with the cooperation of the best workers in this country, to present original matter to its readers and to give to itself a more national character to accord with its name, to make itself, as far as possible, an index of the progress of Photography in America and not a mere reflex of the foreign magazines.

But this does not mean that the Journal will neglect to chronicle and discourse upon the doings of its highly esteemed English and Continental contemporaries.

Our art is cosmopolitan and can grow only by the free interchange of ideas, but the American Journal, while appropriating, hopes to give something of value in return. We shall go on, like the sailors of Jason, adding new timbers to our argosy and removing such as have become old and useless. After its brief rest in port for the past year it launches forth once more full rigged, well manned, and heavy laden with a cargo of photographic wealth, bound on its nineteenth voyage, wishing a Happy New Year to all.

Recognizing the importance of illustration, every effort will be made to render the Journal pictorially interesting, and all the improved resources of photo engraving and chromo photography will be liberally made use of.

The Journal will be issued on the 15th of each month and will contain 48 pages of carefully selected and practically written articles, and extra pages necessary to accommodate advertising.

The price of subscription, \$1.00 per year.

OUR PICTURES.

THE Frontispiece, entitled "On the Lycoming—In Crescent Gap," is by Mr. William H. Rau, of Philadelphia. Selection and combination are the principles on which expression in landscape depends, and the author of the picture has shown his ability in taking directly from nature a subject happily adapted

in all its parts for the purposes of art which ordinarily observers would pass by as uninteresting. It requires not only the possession of taste and feeling for the beautiful in landscape, but also skill and tact in isolating from the surrounding scene, so full of complex elements, a portion which is in all its essential parts a picture, which in the subordination of one part to another gives us a novel conception. There is an ideal of selection as well as an ideal of imagination, and doubtless in the majority of cases the former addresses itself more truly to our feelings than the latter.

In this picture we have the proper relations of light and shade, and disposition of masses, and the contrast of one with another, which, though taken directly from nature, do not limit the scope for the expression of the individuality of the photographer.

We have had reproduced as an example of cloud effects in painting, the celebrated work of Constable, "The Hay Wain," but the picture may also be studied for its admirable composition. Constable, both for truth to nature, management of light and shade, and exquisite drawing of clouds, trees, churches, mills, and other country objects, would be a great teacher to the photographer. He is a perfect master in drawing as he is also in color and chiaroscuro. In color especially his pictures are instructive to photography. They have scarcely anything which might be called warm coloring, but they express the warmth of summer so truly that one fancies he sees the tremulous heated air near the ground. Leslie says that Constable never fell into the common mistake by which Mr. Turner sometimes was influenced, namely, that what are called warm colors are essential to convey the idea of warmth in landscape.

The truth is that red, orange, and yellow are only seen in the sky at the coolest hours of the day, "but Constable fearlessly painted mid-summer noonday heat, with blues, greens, and grays, forming the predominant masses, and he succeeded because his sensibility of eye directed him to the true colors at the season he most loved to paint and which he generally indicates by an elder tree in flower."

SUMMARY OF PROGRESS IN PHOTOGRAPHY DURING THE PAST YEAR.

THE principal direction in which progress has been made during the past year lies in the elaboration of detail and in the improvement of practical operations. This is especially the case with Radiography, the perfection of the means for locating foreign bodies even in the deep-lying tissues, which has been of incalculable value to surgery and to humanity. Sciographs of considerable intensity have been made of calculi in the kidneys and other organs and their location determined to the fraction of an inch and that without the aid of complicated geometric calculations as heretofore. In three-color work some advance has been made, in the determination of the proper fundamental colors, to secure purity of tints by mixture. In color photography no advance has been made of very great importance, but the interest in it has not died out. The Ives Color Process (Kromskopy) for beauty of results and approach to nature tints, is far ahead of anything yet presented. It will soon be accessible to the public in this country and will doubtless receive the same favorable reception here as it has been accorded in England. Advance in technical detail has likewise been made in half-tone work.

Early in the year Herr Liesegang, of Düsseldorf, published in *Photographisches Archiv*, a novel plan for making gelatine reliefs which has a great advantage over other methods of furnishing reliefs, inasmuch as reliefs direct from the camera may be made by it without transfer. The relief is effected by washing from the front instead of from the under side, so that the sensitive coating may be placed directly upon the support, upon which it is permanently to remain.

The process depends upon the solvent action exerted on silver by the persulphate of the alkalis.

Although this action of the per-sulphate was well-known to chemists prior to Liesegang's publication all credit is due him for the novel application of it.

The full process is described in *Photographisches Archiv*, for November, 1897. Briefly it is as follows: A print is made upon gelatine bromide paper exposed and developed in the usual way: the Doctor prefers hydroquinone for the developer. When finished it is brushed over with a concentrated aqueous solution of per-

sulphate of ammonia. About fifteen minutes suffices to bleach the image, the print then being washed in cold water to remove the solvent: the portions of the film not exposed to the action of light will remain unchanged. In this manner a gelatine relief is obtained, the blank portion of the paper corresponding to the darkest portion of the film, the film being thickest in the high lights, the intermediate tones corresponding to half thickness. By dipping the print in dye of methyl violet a perfect negative is formed by the greater absorption of the coloring matter by the thicker portions of the film.

The same method of relief is of course applicable to gelatine plates as well as paper, but the effect is better with the latter substratum.

The process hardly yet admits of practical application, as there is great difficulty in making reliefs direct upon copper by reason of the destructibility of the copper which in turn decomposes the silver-salt liberated by the hyposulphite of soda in the fixing, with the formation of red fog which destroys the relief. The silvering of the copper does not materially better the condition of things.

The recommendation by Liesegang of a protective coat of thin resin over the copper may make this process of more practical utility, inasmuch as the pellicle of resin may be easily removed by solvents prior to the etching of the plate.

The methods heretofore employed for the reduction of too great intensity of negatives have been not entirely satisfactory, by reason of the inequality of their action upon the deposit forming the image. The so-called Farmer's Reducer, as well as the perchloride of iron and citric acid, though they accomplish the work of reduction are in some cases not desirable by reason of their proclivity to attack the shadows too energetically, producing thereby harshness in the negative. The thicker deposits, the very places most desired to thin down, are tardy in disappearing. Early in the year 1898, M. M. Lumière and Seyewetz communicated to the Paris Academy of Science the result of their experiments with the persulphate of ammonia as a reducing agent. The great virtue of this chemical lies in the equality of its action. The uniformity of attack upon the deposit on the plate enables the operator to carry on under perfect control the reduction to any desired degree. The solution of persulphate of ammonia must be

applied in a very dilute state—not over five per cent, inasmuch as a stronger solution is found to act injuriously on the gelatine.

It is also necessary to thoroughly eliminate the hyposulphite from the negative, as the persulphate oxidises it converting it into bisulphite. A thorough washing after reduction is also demanded by reason of the continued action of the chemical in the film even in minute quantities.

The various developing agents introduced during the past year have not had any striking virtues over those previously known, though ortol seems to have qualities approaching the elasticity of pyro in development.

Acetone has been introduced and found to act advantageously with hydroquinone and pyrogallol in connection with sodium-sulphite. This latter developing agent has been found by both Lumière and Valenta to be especially adapted to acetone which is to be preferred to pyro soda, or potash, by reason of its less energetic alkalinity.

Valenta recommends the following formula:

Water	1000 c. c.
Pyro gallic acid28 grms.
Sulphite soda.....	250 grms.
Sulphuric acid.....	6 minims.

For development 30 c. c. to 80 c. c. water to which add 8 c. c. of acetone. The resulting negative is brilliant and vigorous. Bromides act very energetically in retarding.

Lumière claims that pyro acetone is especially adapted for development of X-Ray negatives. The development of such plates should be carried on until the image distinctly appears on the back of the plate. This developer also has an advantage over pyro and alkali in that prolonged development, to secure intensity, may be freely indulged in without fear of staining the negative.

Developing and fixing simultaneously is reported by Mr. Milton Punnett, in the *British Journal of Photography*, as a possibility. This would be a labor-saving device, but its practicability remains to be proved.

CLOUD EFFECTS.

RECENTLY, as I was reading Gilbert Hammerton's "Essays on Art," I came to one which completely capped my pictic aspirations as a photographer. In it he heavily inveighs against even the then modest claim of photography to a niche in the temple of art. As I continued to read I reached the paragraph where he speaks of the pictorial rendering of the sea and sky and incidentally mentions Gustav Le Gray's superb photographs of the sea and clouds.

He quite forgets his avowed purpose to crush the pretensions of photography and becomes enthusiastic, nay even poetic, over these beautiful productions.

These photographs, remember, were made nearly forty years ago, and I mention this fact here to contradict a recent writer in one of the journals who tells us—with a great measure of compassion—that the days of collodion photography ignored all cloud effects and sought for the blankest of blanks for the sky in their pictures.

Le Gray, let us remind this writer, was not the lone particular star of cloud photography of wet-plate days. The photographers of the early period were quite as mindful as the painters of the paramount importance of the sky in their pictures. They felt that it was often the key-note to the whole composition; that if it was too obtrusive it was bad; if omitted altogether, it was worse.

The sky must and always should be an effectual part of the photographic composition.

Painters, as well as photographers, have found a difficulty in translating nature's skies to their canvas.

Constable, perhaps might be considered the most conscientious sky painter, that is he comes nearest to what we sometimes get on our sensitive films. This, by the way, from Hammerton's point of view is hardly a compliment to Constable; but then we shall qualify the assertion by saying, only Constable gives us more atmosphere along with his "wind fretted filaments of vapor."

Turner's skies, transcendent as they are, are rather pervaded with—"the light that never was on sea or land"—and suggest

to us the "trailing clouds of glory" of which Wordsworth speaks in his poem on the "Intimations of Immortality."

The primal cause of the failure to secure these transient shapes of beauty is the superior intensity of the light of the sky compared with that reflected from the landscape.

The great majority of the beautiful photographs of skies are those in which the clouds are coupled with the sea where the light from both is intense and more equally distributed than on sky and land.

With the exposure demanded by the landscape to bring out sufficient detail the sky is literally burned out, inordinately over-timed.

Most landscapes with clouds, where the sky is properly presented, give us by reason of the lack of detail and thinness of the land prospect the impression of moonlight without the moonlit landscape—to most people highly incongruous if not absurd.

It is hardly necessary to refer to the various devices photographers have recourse to that they may give minimum exposure to the sky and maximum to the landscape, since the results so obtained are seldom just what is wanted by the seeker after the picturesque in photography. Sky shades, shutters, flaps, etc., are clumsy things at the best and unless very skilfully manipulated show their action in the picture.

Even when the exposure on the sky is made instantaneously on one plate and immediately thereafter the exposure, more prolonged, on the scene, satisfaction is not always assured.

The question arises here whether it is legitimate, from an artistic standpoint, to employ printed-in skies. It might be if the union were a happy one, but how often does the printed-in sky accord with the scene? The union is too often an incompatible one. Besides this species of faking is in nine cases out of ten patent to everyone. Few have the skill to make the picture without betraying the baldness of the device—the opaque blankness attributed to wet days is preferable to this.

How often is the photographer whose delight is in technique combined with artistic beauty, not artistic smudge or slouch, offended or it may be amused with the blurring of the foliage against the sky occasioned by unskilful vignetting of the printed-in sky. How much more beautiful such a scene would have been with blankness for a sky and the well-rounded, sharply



The Hay-Wain—Painted by John Constable

defined branches against it which one gets when a non-halation plate is used.

Not only are objects in the foreground marred by reason of this obliteration of detail but the distance is also improperly subdued or altogether lost by botchy printing-in.

The art critics who judge these pictures at exhibitions know nothing of the faking process and ascribe a wonderful aerial perspective to the picture, but how different is the beautiful softening effect of true aerial perspective—how altogether unlike this blurr. Yet fine effects may be had by skilful inprinting.

To get the best results in skying we should take into consideration the nature of the subject and study it both as to the method of exposure and the mode of development.

Judicious development has very much to do with success in securing cloud effects with landscape. If the exposed plate is consigned to the developer without due consideration or proper diagnosis of the conditions, rocked till it is done, very little if any of the beautiful sky one has delighted himself with by the view on the ground glass will come out on the resulting negative.

While the landscape is gaining the proper density the sky is inordinately overdone.

A good deal may be done during the course of development to check sky and accelerate landscape, but if it is found that in the race the sky is rushing too far ahead, it is better to stop the development when the detail of the landscape has come up, though without proper density, wash and fix the plate and then have recourse to subsequent local intensification to make the two portions more equal.

This plan, together with judicious printing, will give brilliant results in which the proper relations of land and sky are preserved. A developed plate if well washed from the developer may be intensified before fixing and that too in daylight.

Local intensification is preferable to local reduction, but if it is found necessary to reduce the intense parts locally, a tuft of cotton dipped in the weak reducer (hypo and ferricyanide of potassium) or perchloride of iron and citric acid, may be adroitly applied, taking care that the liquid does not encroach upon the part not desired to be reduced.

Cumulus clouds are not difficult to get upon the same plate with the landscape, but there are so many atmospheric effects,



Sky Prospect

COLLODION PLATE

extremely beautiful, in which the delicate cirrus plays a part, which the method for cumulus would totally obliterate.

Thanks to orthochromacy it is often possible to get these feathery-like forms in their beautiful setting of sky, but even with the orthochromatic plate one must use the yellow screen, but use it with caution and not deeper in tint than necessary so as to destroy atmospheric effect. Bromide of potassium is generally needed in the developer.

Attention is sometimes necessary to the position of the camera when cloud masses or single great clouds are towards the zenith rather than the horizon; that is when clouds alone are the object of the photographer. Arrangements should be made so as to tilt the instrument almost vertically for frequently splendid forms are presented directly overhead.

The judgment of the extreme distance of some cloud varieties is often deceived as they appear to the eye much larger than they look when focused on the ground glass. Of course we can change our objective to get them larger. Indeed it is strange that photography is not more extensively used as a scientific adjunct to meteorology.

The present classification of cloud varieties is very defective. The engravings in the hand-books are the old stereotyped ones from inaccurate drawings by hand and exhibit but few of the diverse forms nature presents.

Look how much photography has done in giving us the forms of lightning flashes! Why not have recourse to it for scientific distinction of cloud forms?

There are many varieties which cannot be arranged under the present system, especially the cloud forms presented at night and the changes which so frequently take place in all kinds of clouds. The combination of terms which is employed is, to say the least, very clumsy.

The peculiar varieties at night, when the illumination is comparatively weak, necessitate quick plates and longer exposure; sometimes as much as a minute is necessary.

Trouble is experienced in focusing on night clouds, but may be overcome by striking a fixed focus by daylight on a point of furthest remove.

There are many beautiful celestial phenomena not yet made tributary to art by photography, though of late it has done much for the painter, and its wonderful faithfulness has wrung reluctant acknowledgment from him.

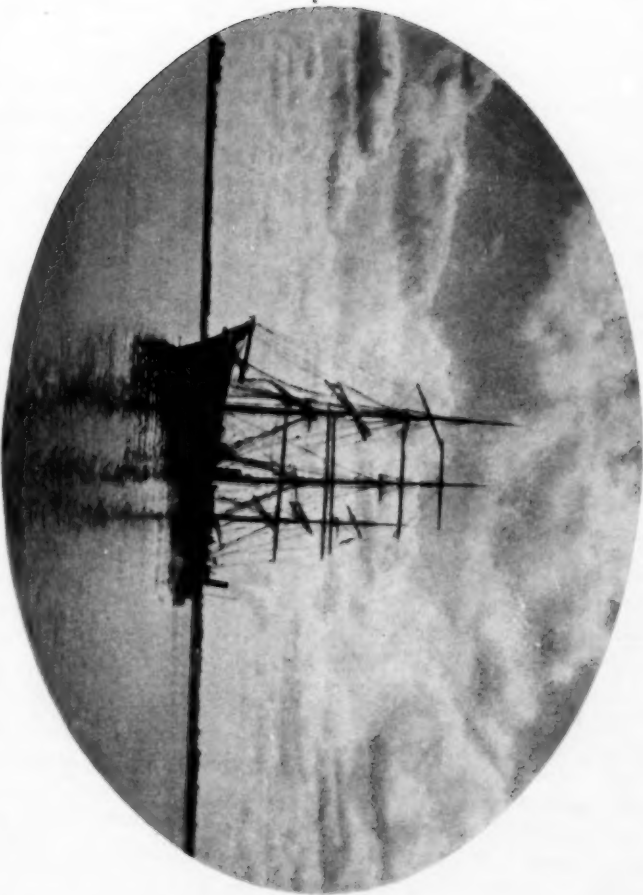
The rainbow has frequently been photographed, but there are appearances most beautiful indeed in calm weather when large masses of bright clouds are reflected in broad columns of light on the sea, just as the sun throws his pillars of fire before him, which await their rendering by the sensitive film.

This is a constant appearance in nature which is familiar to everybody, yet I do not recollect ever having seen it presented either in a painting or a photograph. Not even in Turner's skies (however I have not seen all of Turner's skies).

It is strange how we go on painting and photographing the things which others and ourselves have painted or photographed before us and seldom look from our beaten track to the beauties lavished about us, as Shakespeare says: have

“ ——— Art all ever the same,
And keep invention in a noted weed.”

So much for cloud effects: but did it ever occur to you that the blank sky is sometimes preferable in both a painting and a photo-



Sea and Sky

NEGATIVE BY GEORGE F. ESSIG.

graph, despite what we said about the importance of skies in pictures at the beginning of this article.

There are certain subjects—few, it is true,—which are made better by the omission of clouds altogether. Their presence is too obtrusive, especially in small views, and detracts too much from the interest of the subject. I cannot cite any other class than architectural studies. As a class, particularly where the structure is relatively large with respect to the picture, clouds would be more honored in the omission than in the introduction. The majestic lines of beautiful structures are sufficient to delight the eye in themselves and the imposing masses of light and shade are grandly restful, and cloud masses would only be like a disturbing note in the harmony.

We would like to speak about the glorious results obtained at sunset, or when the sun is just off the lens, or even when it is shining right in the lens from behind the clouds, or the fine effects had by the interposition of the sail of a boat between sun and camera. The play of light upon the water and the varied forms of the vessels, together with the reflections and the strong effects of dark against light, make some of the most artistic groupings produced by photography.

Truly, we would like to dwell on these themes, but refrain. There are many actual impressionistic pictures in nature, in which there is no self-asserting detail to offend the eye of the painter, which may be legitimate products of the camera, and which are like Hyperion to a Satyr when compared with the faked impressionist photographs of our salons.

Let us end with a practical hint. If you will make cloud negatives for future in-printing make them—we beseech you, thin enough to print quickly, but still with contrast enough to make them effective, and then study the eternal fitness of things and do not attach clouds taken with an almost vertical sun, to a scene in which the lengthened shadows betoken the close of day or the early morn.

BINGEN ON THE RHINE.

BY ARKAYBEE.

OF all the pretty places along the picturesque Rhine there is probably no one place so teeming over with such pleasing photographic subjects as Bingen, and the "man behind the gun" will find so many good "targets" to "fire" upon that it is only when his ammunition begins to run low that he realizes what an interesting old model he has encountered.

The most picturesque part of the Rhine is situated between Bonn and Bingen and just how many interesting "exposures" one could get between these two points no man ever knew, for he



In the Vineyard

never owned plates enough. I had finished up Cologne, with her magnificent Cathedral, and as "grape time" was about due I took an evening train for Bingen, arriving there some time before midnight and after getting my baggage and heavy trunk of plates arranged in my room I "sounded" the clerk on "grape time."

"Yes, grape harvest, yes, that commences to-morrow;" and upon further inquiry I learned that along some time in September, after the vine requires no further cultivation or attention, the

vineyards are all formally locked by the police department, and not until the 20th of October, when grape harvest commences, is one permitted to go into a vineyard without special authority from the police : but when this day arrives there is a "grand fall opening" of all the vine-clad hills of Bingen and every man, woman and child is "turned loose" with a clipper and a bucket, or a basket, or a kettle, or a pot, or any old thing that will carry grapes. The schools are all closed for the occasion and every other industry suspended.



Bringing in the Grapes

What a grand sight it is ; nature has taken on her pretty new gown of "sear and yellow" and the terraced vine-covered hills around Bingen are laden down with a summer's abundance of all that has made her so famous.

Now is the harvest time, and with the dusk of evening comes the tinkling of the bells and the returning crowds of jolly, merry-making harvest hands singing their vintage songs.

A beautiful panorama of Bingen and the surrounding country may be had from the old tower of Castle Klopp on the hillside just back of the town—an ideal place for a castle, and where once upon a time, many years ago, stood an old Roman fortress and

later a castle which the French destroyed in 1689, but again rebuilt in the present picturesque style. A number of pretty subjects will be found here and a climb still further back and higher on the mountain to Scharlachkoff and Rochuscapella is well worth the beautiful view to be had of the Nahe river and valley, dotted with villages and vineyards as far as the eye can reach.

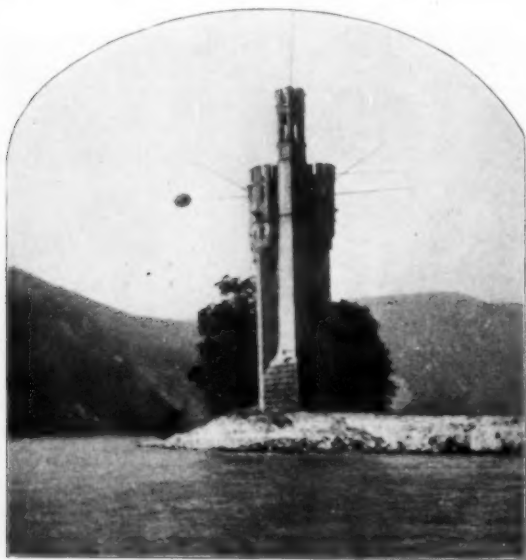
A short distance below Bingen and situated in the middle of the Rhine on a small island, stands the far-famed "Mouse Tower," which fills such an important part in the legend of the bold, bad Bishop Hatto, who, according to



View on the Rhine

tradition must have been a "holy terror" of the old school. During a terrible drought and famine his impoverished subjects were pleading in vain at his palace gate for something to eat, and finally resorted to forcible entry only to find Mr. Hatto enjoying a luxurious banquet. Receiving his unwelcome guests with as much "political diplomacy" as he could muster up under the circumstances, they were promised all they wanted from a large storage barn near by, and when they had all gathered within, the doors were fastened and the barn, with its unfortunate inmates, burned to a smouldering heap. From the charred ashes came millions of

mice, who, in conjunction with the "vengeance of heaven" led old Hatto a lively chase, for they besieged his palace and "filled every apartment," assailing the Bishop in spite of his desperate defence "with bold avidity." Finding that he was now "out classed" he made his escape to this tower in the Rhine, but this afforded no safety, for the mice swam the river, and, driving the Bishop up into the tower, "devoured him from his bones." The tower remains there to this day to corroborate the legend and also to fly signals to the boats plying on the Rhine.



Mouse Tower

Across the Rhine from the Mouse Tower and up on the mountain side surrounded by terraced vineyards stands the picturesque old ivy-covered ruins of Ehrenfels, a relic of 1210, badly damaged by the Swedes in 1635. In 1689, the French turned it into its present picturesque condition. There is something so naturally artistic about the French—a sort of in-born latent artfulness that seems to display itself even in the bombarding of a castle. How could any other army have finished up a more picturesque ruin?

Further up the river on the same side, diagonally across from, and above Bingen, stands the town of Rüdesheim, famous the world over for her fine wines. From the base of the Niederwald mountain stretches to the east the broad fertile valley of the Rheingau, supposed to have been at one time a lake, but to-day the rich producer of the celebrated "Rüdesheimer" wine. There is a fragment of old Vorderburg castle remaining here yet, a relic of the distinguished knightly family of Brömser, and down near the banks of the Rhine stands Brömserburg, the scene of the romantic legend of Gisela, the beautiful and only daughter of the brave lordly knight of the house of Brömser.

From here he started upon his heroic and thrilling pilgrimage to the Holy land, to take part in the annual tournaments with the Saracens, playing "right tackle" in one of the most romantic and exciting campaigns on record, during which time he rode alone into a deep, rocky ravine and slew a monster dragon that was "coated with scales, had legs with sharp claws, and wide jaws, armed with double rows of thorn-like teeth." But that didn't scare Brömser—he just tied his horse right there and while the poor horse was being devoured the lordly knight came quietly up from behind, and, with his good trusty sword, in "one time and two motions" he "whacked" Mr. Dragon across the tail and so broke its strength. "Raging with pain it turned and snapped at Brömser with distended jaws, but the resolute knight threw his shield into its mouth and at the same time thrust his sword to the hilt into its loins, causing the monster to fall to the ground and die." Being now covered with glory and dragon's blood he was about to return to his beautiful Gisela when a band of Saracens swooped down upon him and toted him off to the seclusion of a solitary dungeon. "He thought of his beautiful domain and Gisela, with melancholy, and in the despondency of his heart, he made a solemn vow, that, if he was allowed to return home, he would found a convent and dedicate his only loving daughter as its first nun." So, one dark night, the Christian army made a charge upon the dungeon, released the knight and led him triumphantly into camp, and after a long and fatiguing journey he returned to Rüdesheim, where Gisela and all the hired help "received him with jubilation, weeping tears of joy." But during all this time Miss Gisela had been keeping company with a young fellow by the name of Falkenstein, who came around one afternoon when papa was

home to "stake out his claim." But the solemn vow made in that Saracen dungeon was to be carried out : so, "as soon as Falkenstein understood this, he rushed, like a madman, out of the saloon, mounted his charger and galloped away, but Gisela fell insensible to the floor and from that hour she was deranged. She wandered like a spirit through the wide corridors of the castle, and once, as a raging storm ploughed through the waves of the Rhine at the midnight hour, and the howling tempest broke the oaks of the near forest, the unfortunate one crept to her father's bed,



Panorama of Bingen

whimpered him farewell, hastened then to the balcony, and precipitated herself into the Rhine." Her body was found floating on the river and there is a legend that her ghost still haunts the scene of her death, and is seen at times floating about the river.

As I stood, absorbed in revery, I happened to glance down toward the river and there, behold, was a strange looking figure upon the shore. With thoughts of the beautiful Gisela, I approached, camera in hand, only to be disappointed, for what I really saw wore big wooden shoes and a short petticoat and was doing a big day's wash.

PHOTOGRAPHIC SNOW PICTURES.

SNOW photography has the claim of being a seasonable, though it might be accounted rather a trite subject.

However, it is, I think, one which like the periodical return of comets is welcomed by some one to whom the subject is new, and as the ranks of photography are constantly being augmented with raw members, perhaps the topic may at least be acceptable to them. Snow photography is a tempting subject, but not a very easy one to tackle, and really requires some previous acquaintance with exposure methods to get any satisfactory results. So my remarks may be of use to the inexperienced as well as appropriate to the season.

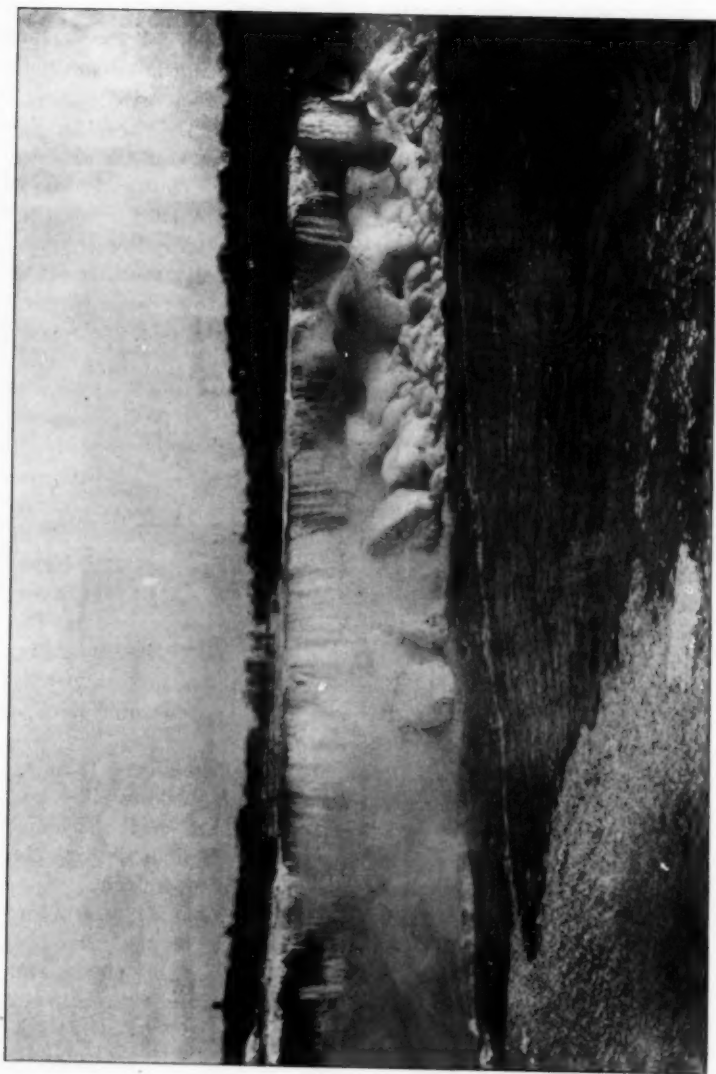
The very first thing in snow picturing, but in truth I might say in any sort of picturing by photography, is to take into consideration the general effect. Attention to this consideration is of especial importance in snow subjects. The scene is so bright and dazzling that one is deceived and sometimes a large object in the foreground will come out too dull in comparison with the rest of the picture. Great danger arises from harshness, the high lights are so brilliant and the shadows so intense. It should be remembered that too great contrast is at expense of gradations and the object is to secure such gradations, in the high lights especially. There is great danger also in encountering spottiness or patchy effect, instead of breadth secured by proper contrast of masses of light and shade.

There is a good deal more local color in a snow scene than we imagine. Look for instance at the colors the shadows take, and in addition there is often an atmospheric haze in the shadows occasioned by vapor from the melting snow. Besides, I think the eye is deceived by the contrasts of strong light and shade.

Getting a good foreground seems to be generally the most trouble. It is usually of a non-active color demanding much more exposure than the snowy white background. This means over exposure for the latter if anything like right time is given to the foreground.

A sort of compromise has to be made which calls for exercise of judgment.

We do not want mere silhouettes for foreground from under-



Niagara in Winter

WILLIAM H. RAU

exposure or loss of gradation in the light parts by over exposure.

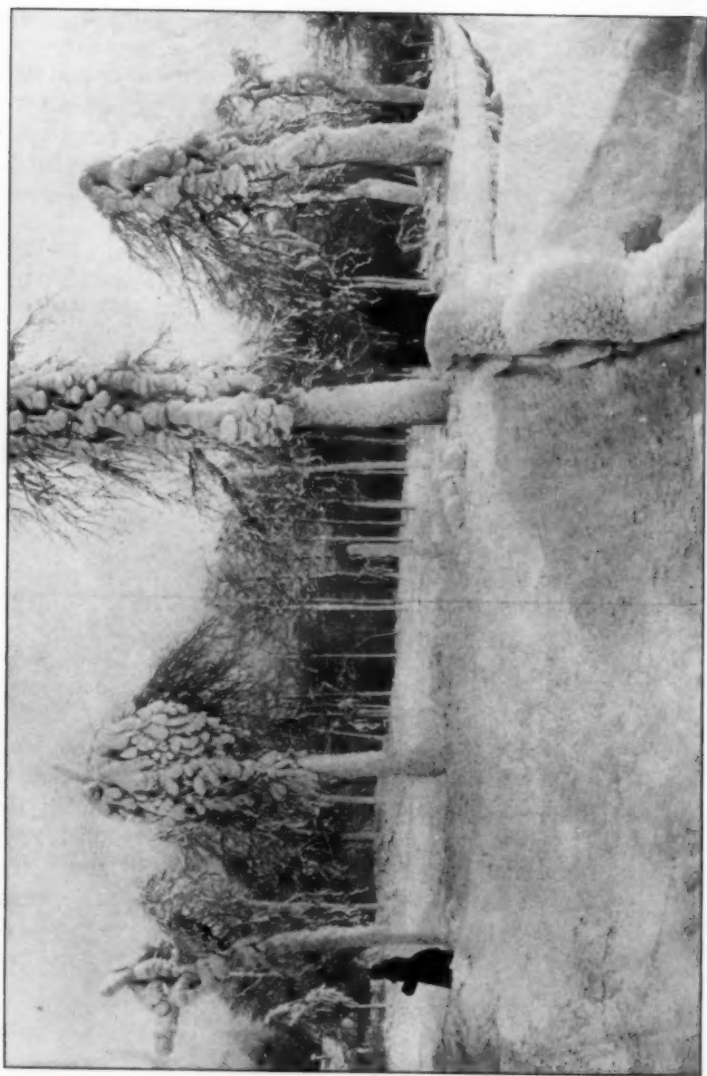
The angle of illumination has something to do with picturesque rendering, so that one portion of the mass of snow or ice may be relieved against the other masses. This will give us relief in the photograph and sometimes a very beautiful stereoscopic effect. Rocks covered with ice or icicles and snow are beautiful in this contrast of light and dark, but the greatest care is needed and judgment too in both exposure and development.

Undertiming is as bad, perhaps worse, than slight over exposing, but the best plan is to try to select the proper time.

It is rather presumptuous for one to write on snow photography and try to give instruction to some perhaps whose climate offers much better opportunity for securing fine effects than the latitude in which the writer lives. Most of the snow around the region of Philadelphia is of the blizzard-like-hard-frozen-pellet kind which leaves the boughs of the tree bare of that lovely feathery like winter foilage which we see in English pictures; but everyone's experience is of some value, and a word about development may be useful.

I like hydroquinone and eikonogen with carbonate of potassa as the alkali better than pyrogallic acid because there is less danger of too great contrast as with pyro.

Too strong development as well as too tame is to be avoided. The development should be so regulated that the shadows may evolve their gradations, and the high lights not be harsh and yet not smudgy or flat. There is no cast iron rule for snow development any more than for other exposures. Experience is the only guide, and experience is often attained only at the expense of failure. Nevertheless, the few cautions I have offered may prevent the loss of plates and perhaps be of assistance in obtaining picturesque effects with snow exposures.



In Winter's Robe

WILLIAM H. BAU

THE PHILADELPHIA PHOTOGRAPHIC SALON.

THE great object of the Salon is distinctively set forth in the preface to the Catalogue of the Exhibition.

"The possibilities of photography as a method of artistic expression are now generally admitted." Recognizing this fact, the Salon declares it their purpose "to show only such pictures produced by photography as may give distinct evidence of individual artistic feeling and execution."

"For the first time in this country is presented a photographic exhibition confined exclusively to such pictures rigidly selected by a jury whose certificate of acceptance is the only award." Furthermore, we are instructed in what photographic art consists, and what topographic photography is. We are informed that "a far greater interest centres in a picture displaying artistic feeling and sentiment than in one which simply reproduces faithfully places or things in themselves interesting. *In one the picture itself pleases—this is art; and can be produced by photography. In the other we think only of the object reproduced, admiring, perhaps, the technical excellence displayed—that is photography.*"

The Exhibition was indeed an interesting one,—additionally interesting by reason of the unexpected iconoclastic zeal with which the judges disposed of photographs which had aforesaid plumed themselves with the possession of artistic merit, and which were submitted to the judges, in all-confident expectation of their easy acceptability as works of art.

Despite the onslaught upon the old school of photography, despite the wholesale discrimination in weeding, there were a goodly number of pictures of high merit hung: some of which for beauty and audacity of execution were quite a revelation to those who pursue photography along what has been hitherto considered the legitimate channels. But it must be confessed that there were also many admitted as wedding guests to this artistic feast, without the semblance of the proper wedding garment of art, and which, judged by any standard, ought to have been thrust into outer darkness. Evidently the judgment of the critics, however little it may accord with our views of what is pleasing was not directed by hostility to any particular class of photographic art.

It was the unbiased expression of their feeling and sentiment and not the result of predilection for fuzzyism or impressionism.

The means of producing pleasurable effect was evidently not taken into consideration. The result—production of a picture which pleases, was the dominant idea controlling selection. The limiting of the criterion whereby to judge of artistic merit to a consideration of what pleases a select few, is rather a Procrustean bed whereon to lay art—photographic art—and unceremoniously lop off its extremities. It might have been more instructive to have known the reasons for rejection than to have had peremptorily pointed out to us what is artistic. The reply that artistic merit is dependent upon the power which the photograph has of arousing artistic feeling or sentiment, is akin to the definition the Rabbit gave Alice in Wonderland—"Mabel is Mabel—."

When the Angel Raphael was on his way to earth to visit Adam, Milton tells us, as he winged his flight through the Angelic hosts and passed through the gate of heaven, he caught a distant glimpse of our earth like a far off star; then, as he progressed, the outlines indistinct of her continents and seas appear

"As when by night the glass
Of Galileo less assured observes
Imagined lands and regions in the moon."

This is what one might call the scientific treatment of landscape photography, topography let us say, which lays no claim to artistic recognition.

But as the angel approaches the earth he sees:

"As pilot from amidst the Cyclades,
Delos or Samos first appearing, kens
A cloudy spot."

A cloudy spot.—This symbolizes the impressionistic school of photographic landscape art.

But Raphael ere long "on towering eagles' wings"—rests on the Eastern Cliff of Paradise, and comes

"Into the blissful fields through groves of myrrh,
And flowering odours, cassia, nard and balm,
A wilderness of sweets."

This is descriptive of pure realistic landscape full of unobtrusive detail, yet withal acceptable to art.

It is the landscape in which we live—it is of the earth; earthy, yet lovely. In it we delight, and when faithfully reproduced in art we delight in it also and alight on it, with Raphael's "profound contentment."

Where nature, as she often does, softens the outlines of things and even masks in mists the actual forms of objects—

When,—

“ Sometimes we see a cloud that’s dragonish
A vapor presently like a bear or lion.
A towered citadel, a pendent rock,
A forked mountain or blue promontory
With trees upon it, that nod unto the world
And mock our eyes with air.”

then it is legitimate to translate it by the brush and paint or the camera and chemicals.

Monochrome photography, if it has an art status, holds that position by the simple of its faithful representation of nature in whatever phase she is presented to us by photographic methods and not by artistic dodges or devices.

Painting has its peculiar legitimate methods which are not peculiar or legitimate to photography. Painting, justly, because of necessity, has recourse to all sorts of tricks to cheat the imagination, to convey to the mind the impression with which a superbly colored landscape affects our mind through the vision. The mind sees nature’s coloring, not that nature has any of that coloring, but because our retinas have certain areas of nervous impressibility through which the mind looks.

The faking or dodging which painting must make use of, is resorted to not because the painter despises to give us an actual transcript of the harmonious coloring of nature, but by reason of the limitation of the means to do so.

Painting suggests nature : and is consistent in her treatment.

But in suggesting it is often compelled to give us a color or a form which has no actual existence in nature (a form because color often deforms objects.) How would it be possible, for instance to paint a scene with a golden sunset without unduly depressing the illumination of the rest of the landscape.

The relative brightness of the sky can be conveyed only by darkening excessively and unnaturally everything else in the picture. Yet how much nearer the truth, the actual truth in scale of gradations, is the monochrome photograph. The blankness of the paper or the transparency of the glass gives an intense high note in the scale and the relative values are better presented.

It seems to me that photography is running on crutches when it forsakes its own legitimate method of monochrome and en-

deavors to imitate the results of the painter in color. Such pictures look only like poor copies of paintings and despite the ability in composition one grows weary of them.

Photography has won "golden opinions which should be worn in their newest guise, not cast aside so soon." And when one reads the published statement of the Pittsburg International Salon, to be held in February next, that technical excellence is to receive but little consideration from the judges—one fears for the future of our art. What an open door for careless, slouchy work. It seems about time to call "hold, enough."

A METHOD OF TONING WITH URANIUM.

G. GIBSON.

THERE are quite a number of agents designed for intensifying weak negatives, most of which are efficacious, provided the pictures are not deficient in detail, lacking only opacity sufficient to obtain contrast in printing. Mercury and ammonia or the other combinations of mercury probably are the best for such cases, but when the exposure has been too short mercury is of little avail, indeed the harshness of image is only further increased. Silver intensification gives more harmonious results but there is danger of staining the film. Uranium has been found useful as an intensifier and comparatively easy of manipulation. But my object is not to present uranium as an intensifier but to call attention, though I know its application is not new, to its use as a toner for prints, admirable because it is so easy to secure by its aid pleasing tones of considerable variety. Various salts of uranium in connection with ferricyanide of potassium (the red prussiate of potassa), act more or less as toners, but the persulphate of uranium gives the most satisfaction.

Make a ten per cent solution of ferricyanide of potassium; also a ten per cent solution of persulphate of uranium.

For use, dilute with equal bulk of water for albumen prints or four times as much water for aristo paper prints.

The mixture should be of a clear reddish brown color. The action is rather rapid, especially if the solution is used too strong, and it is best to start with a weak bath. The tones obtainable are brown, chocolate, purple brown, purple and plain black if the action is carried on.

Too far toning gives unpleasant slaty black colors. There is scarcely any danger of stain or of double toning. When used too strong at first the tone is liable to incline to foxy red. One peculiarity of this toning method is, it must be applied to fixed prints thoroughly washed.

After printing to the desired depth wash the prints as usual, fix (for aristos in weak hypo solution), then thoroughly wash. Insufficient washing will not cause stain but the print will reduce in the subsequent toning and have a faded appearance. Toning unfixed prints with uranium did not give me any good results.

This toning solution is adaptable to transparencies and lantern slides, giving the same range of tones, but it should be used quite strong—almost the ten per cent solution.

The tones on paper prints are pleasing but whether lasting I cannot say as I have only employed the method for little over a month.

FINISH.

MARY K. IRVING.

SUPPOSE you were asked to photograph three bricks, one of gold, one of wood, and one of genuine kiln-baked clay.

You would at once notice that by nature the three objects are distinguished from each other not by size nor by shape but by color and peculiarity of texture. With color of course photographically you would have little to do; but could you so easily get over the question of texture? Would you consider it legitimate by artfully disposing of your illumination, or by working with your developer, or by faking with your printing so to represent in your picture the form and semblance of things that one would be unable to tell by your obliteration of all detail or avoidance of the exactness and minutiae of nature, whether a brick of gold or of wood or clay is intended?

Form, size and outline cannot make us distinguish their finish. So attention to proper rendering of things as they actually are cannot be neglected either in painting or photography. Because painters, that is the great majority of painters, are quite unable to make their clay, wood, gold or flesh, look like clay, wood, gold or flesh, through lack of skill, is it any reason why photography should deprive itself of the use of its chief excellencies in rendition of natural subjects, and try to make its

work look like the shortcomings of mediocre artists?

Alma Tadema is not afraid of technical accuracy. Far from detracting anything from the value of his conception it enhances the range of his dramatic invention. Look at his varied and complex powers of minute draughtsmanship, especially in his architectural detail. The translucency and peculiar glow, as well as the texture of marble, is there; there is no mistaking it for gold or clay or wood. We do not think, apologetically, it is marble because it is white veined and used in making the walls of a Roman villa or bath.

I have before me some engravings from the paintings of Reynolds and Gainsborough, neither of whom think it beneath their attention to accurately draw the frills and trimmings of collars and cuffs with photographic perfectness of detail and finish. Even in Reynolds' ideal study of Mrs. Siddons as the Tragic Muse, there is a human sweetness and beauty in the little accurate touches of detail of dress and drapery.

Both these great painters everywhere in their work show a predilection for representing external and corporeal qualities. Reynolds' picture of Mrs. Pelham feeding chickens, has a delight for me, among its other qualities, because it has all the accuracy of a good photograph. We have all been educated to look on paintings with a sort of consideration for the limitations of art to represent texture, so we let pass a leather tree or a paste-board rock, allowing the imagination to amend them.

Jules Breton's picture, "The Communicants," is not a wit less admirable because it renders texture so photographically accurate. It is a large picture, and size is sometimes an excuse for broad treatment, but he does not disdain to accurately paint clothes and shoes, or hair and flesh so that if we conceal their connection with the figures they would still give us an idea of their specific qualities. The rendition of the stones and rocks, the grasses and the trees, is all there realistically, even the straw thatching on the roofs is straw and not a smear of paint. Why do people who well know what sheep's wool is—perhaps trade in the very article—pretend to be delighted with the abortions in the shape of fleece on the backs of sheep depicted in some paintings.

There are hosts of good painters—English, French, and American, who aim to express themselves definitely by accuracy of finish.

The English and American examples, perhaps, are not as plentiful as the French, but we can point to Holl Duran, Clara Montalba, Sargent, Parsons, and we have already spoken of Tadema.

But for texture painting in all its beauty turn to the Dutch, Van Steen, Terburch, Dou, Hals and a host of others.

Fortuny, in all his paintings, shows how delightful to an eye unprejudiced is the wealth of his detail, however much the idealist may deplore the lack of nobleness of his conceptions.

Then there is Vollon, who painted armor, flowers and fish, with elaborateness of detail and minuteness of finish: Courbet, who painted marine subjects and forest scenes: De Nittis, street scenes: and Troyon, meadows, brooks and streams.

But I think I have quoted sufficient examples of good painters who did not despise detail where it was not unpleasantly obtrusive, who did not purposely smear or blot to impress us with their poetic sentiments.

They take pains to emphasize the differences of things by textural rendering, they make it apparent that there is a difference between a brown rock or a tree, between smoke and cloud.

It is the same with Titian's forest-leaves and stones and tree-trunks. All have their detailed statements of minor fact. So with Raphael's subtle finish or Leonardo da Vinci's. Do you find in their works blotted leaves or blotched grass or doughy tree-trunks, wadding clouds?

A great art critic has said: "He who can command or produce Beauty, Truth or Power, in the motive of his picture, will never lessen its value or impressiveness by trying to give it accessory truths and beauties."

The effect of a large sapphire is not diminished by clustering it about with small diamonds. All true finish is added fact.

One more example and we shall say no more in our plea for accuracy of detail with appropriate view or conception in composition.

Millais' "Proscribed Royalist,"—Would our interest in the subject matter be increased had the painter, instead of showing us by its satiny texture that the young lady had on a satin skirt, portrayed it so that we might be undecided whether it was leather, paper or muddy paint, with a certain number of conventional folds and pleats in it?

PLAIN SILVER PAPER FOR ARTISTIC EFFECT.

HENRY RAWLEIGH.

THE selection of the kind of printing process which shall give the best rendering of the subject forming the negative is not always taken into proper consideration. The seekers after artistic photographs are very apt to discard as unsuitable any kind of printing process which suggests high, glossy surface,—not stopping to consider that polish may best adapt itself to the peculiarities of their negatives. In my professional work, as printer of all sorts and conditions of amateur negatives, I have often wished that my patrons had left the choice of the kind of paper to my own judgment, since frequently I have been required to make platinum and carbon prints from negatives so thin that the result is an eyesore to myself, though not always one to the enthusiastic amateur. Still I like to produce good work for my own satisfaction at least. High gloss has its value for expressing the almost imperceptible good qualities in a ghostly sort of negative; it materializes the phantoms, sometimes most astonishingly even to myself. But there is such an antipathy nowadays to highly polished prints—their mere showing to a board of exhibition judges would be their summary condemnation, so exhibitors, at least, are obliged to conform to the ruling taste if they desire to get admission to the salons.

Plain printing is not such plain sailing as some writers pretend, that is if beautiful artistic effects are aimed after, and especially if the negatives are not adapted to the process. One sees a good deal of platinum printing done by amateurs, but the majority of the results are not strikingly good and personally I know that many sheets are ruined to get one good print. Platinum printing requires the exercise of much judgment and the expenditure of much care, to be of any value artistically. How frequently black and white or one-tint-all-over-prints are offered for commendation. The secret of success with platinum printing is dependent upon close attention to detail, for the image, being only faintly visible while printing, requires to be critically watched, for the least over- or undertinting is fatal.

Bromide printing is more popular with amateurs and it is even claimed that experts cannot tell the difference between bromide prints and platinum, but a critical eye, indeed not a very critical

eye, can detect the difference between the richness of gradations in one over the other. The shadows in the platinum will bear magnification without injury to the fineness of grain, but the bromide, under the glass, is rough and coarse in comparison. The deposit in the one is finely divided platinum, in the other granular bromide of silver. But bromide paper gives infinitely better results to the average amateur and it is more advisable that he keep to that method of printing until he has mastered the details of platinum work. The slow varieties of bromide paper now on the market are excellent and easy of manipulation and with only a moderate amount of care will give better results, even with comparatively poor negatives, than could be hoped for from platinum except in the hands of an expert.

But of all the processes of plain paper printing nothing is more valuable than plain silver paper printing. It is as old as photography itself, probably older than glass printing since the first negatives were made of it.

It is a valuable process because it is simple of manipulation and capable of yielding any desired effect, even carbon effect, rough or smooth, brilliant or subdued.

By the way, rough surfaces look well only in large sizes; small prints had better be confined to surfaces at least moderately smooth. But then there is no accounting for taste and the demands of art critics. The nature of the subject should always be taken into consideration whether a broad treatment is demanded or the contrary. For instance an interior of a hall, parlor or library, which is interesting by reason of the delicacy of the detail which solicits our attention to minutiae would be spoiled on a rough surface—all the rich, fine gradations would be lost.

The preparation of the paper is so simple that the amateur (used as he is to ready prepared things photographic), would not hesitate to enter into it with gusto and feel better satisfied that he had entirely accomplished his own work independent of the shops.

The paper employed may be had of any dealer. Rives' or Steinbach's or even Whatman's drawing paper gives as excellent results, but poor quality of paper is to be avoided, giving flat ugly-looking results. Ordinary paper ought not to be used.

Two operations are necessary: The first, exceedingly simple, namely, the salting. Ready salted paper, however, may be bought at the shops.

If the paper needs sizing incorporate the salting mixture with the size.

Take 2 drs. gelatine, soak it in clear water for an hour. Weighing out, in the interim, 160 grains of common salt. Pour off the water from the soaked gelatine and pour on ten ounces of boiling water, stir the mixture and when the gelatine is dissolved add the salt and the solution is ready for the paper. Float the paper in the solution, or if you are not skillful enough to avoid bubbles brush it on. The one is as good as the other; the brushing on is easier.

Lay the paper on a sheet of glass, dust off the surface of the paper and apply, preferably with a hog's hair brush, the sizing and salting solution; work it in well, especially on rough paper, but be careful to keep it from getting into the back. The glass of course must be cleaned off each time previous to the next salting.

The paper is dried by suspending it by one corner upon a cord or rod of wood; the superfluous liquid will drop off at the opposite corner. Rapid drying is not objectionable if time is precious.

To sensitize the paper take one ounce of nitrate of silver and four ounces of distilled water, and in a separate vessel 200 grains of citric acid and four ounces water (distilled), then mix the two solutions.

This solution keeps a long time but should be filtered occasionally and kept in the dark. The operation of sensitizing is, like the salting operation, performed with a brush, but this brush should never be used for anything else. Do not be sparing of your silver in applying it to the paper, but cover the paper well as it is easy to get rid of the surplus amount. Pour a pool in the centre of the paper and brush well into the pores of the paper, backward and forwards. The salted paper is somewhat repellent of the solution and requires a thorough action to penetrate the fibres.

The paper may be dried spontaneously in a dark room but there is no objection to drying by dull heat. On drying the paper is ready for printing. You may either fume with ammonia or not according to results aimed after. If fumed give it 15 minutes in the fuming box.

The paper prints rapidly. Print rather deep, as there is considerable reduction of the image in toning and fixing. A variety of tones may be secured by modification of the toning bath.

If you wish the artistic red do not tone at all but simply wash the print in water several times, then transfer to hypo solution.

This gives bright red tones. A great variety of shades may be had with gold bath: platinum may also be used but almost the same effect may be had with gold.

A good gold bath giving a variety of blacks, browns and purples is made as follows:

Hot water.....	30 ounces.
Phospate of soda.....	20 grains.
Acetate of soda.....	30 grains.

when cold add to it two grains of chloride of gold.

Wash the prints well after taking them from the frame. Stop the toning when the proper tone is reached, plunge into the wash water and then transfer to the hypo solution: 15 or 20 minutes is ample fixing. Do not be surprised or disappointed at their appearance of loss of vigor in the hypo—this seeming flatness is due to porosity of the paper; they will dry down brilliantly.

The plain paper is not as tough as albumen or aristo papers and requires more careful handling in the solution and in washing. Wash thoroughly after fixing.

There is a certain relation between the printing and toning which affects the tone of the print.

A great range of tints is possible if we remember that: deep printing and quick toning gives sepia tones and browns, deep printing and long toning will give purples and blacks, (the word long toning used here is only a comparative term, as the toning of plain prints is quick work, much quicker than with albumen or gelatine prints, often a mere dip or a second or two suffices to give a tone required. Use care and judgment and you will succeed.) To continue, light printing and short toning gives light sepia tones and light printing and long toning gives cool greys and slaty tints. Other fancy tones may be had with use of uranium and also with mercury and bichromate of potassium but the beginner had better study, and if need be experiment with the gold toning bath. By its use beautiful rich effects may be secured which are delightful to look at.

TONING WITH SULPHOCYANIDE OF AMMONIUM AND GOLD.

B ELITZSKI, in *Deutschen Photo Zeitung*, has added some points of interest on the preparation of the sulphocyanide of ammonium and gold bath, chiefly by the systematic method of compounding it.

He emphasizes the fact that there are two compounds of gold and sulphocyanogen, the auric sulphocyanide and the aurous sulphocyanide. These compounds are formed by double decomposition of gold chloride with a soluble sulphocyanide. If one molecule of dry gold chloride and three of ammonia sulphocyanide are dissolved in water and mixed together a greenish grey mass is precipitated not soluble on addition of ammonia, even with boiling, proving that a change has been effected in it. If an additional molecule of the sulphocyanide is employed beyond that which is necessary to precipitate the gold, an easily soluble, double salt is formed and the precipitate instead of being of a grey color is of a beautiful yellowish brown slightly soluble in excess of sulphocyanide of ammonium.

Heat alters the color of the precipitate to a beautiful red liquid which on increase of temperature becomes colorless.

This is the aurous ammonium sulphocyanide. Practically, however, it is necessary to double the amount of sulphocyanide above that calculated; that is double that of the gold employed.

Any great excess of sulphocyanide of ammonium (sometimes recommended when acetate of soda is used in the formula), is not advisable, as the excess is found to act prejudicially upon the tone as well as the keeping quality of the bath.

The practical formula recommended by Herr Belitzski, presupposing pure chemicals are used, is as follows:

Dissolve 1 gramme of dry brown chloride of gold in 90 c. c. of water (distilled).

Dissolve also in a porcelain dish 2 grammes of ammonium sulphocyanide in 90 c. c. water.

Add the gold to the sulphocyanide and stir quickly, heating the mixture over a spirit lamp until the solution becomes first red, then colorless: heat till boiling commences.

Cool, and filter until filtrate measures 200 c. c.

On cooling the liquid assumes a yellow color.

The solution will keep for a month or more but probably it had better be kept in a colored bottle or in the dark.

The tones acquired by the use of this bath, Herr Belitzski tells us, are remarkable for richness and brilliancy, giving a scale of tone from brown through purple to blue and black. Moreover there is no danger of having double tones and in all probability the tones are permanent.

PORTRAIT POSING.

BURKE, in his "Sublime and Beautiful," has left a description of what he terms the most beautiful object in nature,—the head and shoulders of a lovely and innocent female.

The composition of a single head conceived with grace, natural ease, and all that makes a picture attractive, and at the same time which presents a likeness of the individual, is one of the greatest difficulties in art. Yet, an enthusiastic amateur photographer, who cannot plead the professional's excuse of pressure for gaining livelihood, will undertake a half dozen different poses and lightings in almost as many minutes, and feel disappointed at the paucity of pleasing results.

"To hasten slowly" would be a salutary injunction to most of us. The "fatal facility," as someone has aptly said, of photographic delineations, makes us impatient, or it may be, makes our patrons unreasonable when sitting before a lens,—more so, indeed, than they would be with a painter when lining out his portraits.

The other day I was asked to aid a well-known portrait painter with my camera, in securing detail which it would have required hours of patient labor to obtain, and I was surprised at the gracious and kindly acquiescence of the lady sitter, to the artistic demands of the painter, though he at times completely changed the attitude and illumination, which had required more than a quarter of an hour in arranging, and almost three-quarters of an hour elapsed before he secured a satisfactory pose.

Had the lady been sitting for her photograph she would have grudged the expenditure of one-third the time, and have given all manner of advice and injunction to the operator. I was recently amused at reading a card of advertisement of a Philadelphia photographer, who has been very successful in a new departure in professional photography, wherein he plaintively asks his patrons "to exercise as much patience in sitting as he himself must endure in securing artistic results." This is a great advance in method over the barber shop plan of, "Next, please!" I think there is one advantage at least, that photographic portraiture has even over the portraiture of the painters, though one might be called a philistine for entertaining such a view; I mean the intense realism of a well-conceived portrait by chemicals.

The idealized portrait, where the sitter is absorbed in thought

and has no connection whatever with the world we live in, where the expression conveys the impression of absent-mindedness,—akin to the heroic repose of Greek sculpture,—the effect is never as vivid, or really sensuously as enjoyable, as where the portrait is almost on the defensive attitude and shows as much vigilance in gazing at you as it does dignity in questioning your intrusion. Such pictures always make one collect oneself to reply to the question the portrait is about to ask: "Well, what do you think of me?" This expression is quite different from that self-conscious look which is called the "photographic face."

This intense personal character stamps such portraits with a living and permanent interest. Of ideal pictures you tire if you have them constantly before you; they are soon dismissed after you have criticised them, even if with enthusiasm. The ecstatic state is tiresome when long continued or frequent in occurrence. The portrait which looks at you is after all the most human, there seems to be some question pending between you, and a fascinating power is exercised over you, because of its individuality which is always new.

People sometimes wonder why there should be any difficulty in photographing a face and ask what you have to do besides uncapping the lens and consigning the plate to the developer. The difficulty with the photographic portraitist as well as with the painter of heads—lies in possession of ability to see what of beauty is before you; and here the individuality of the photographer may make or mar his work. One imagines he sees the whole of nature when he sees it through his own spectacles of preconceived ideas—it may be erroneous ideas—of the beautiful. The production of an artist is often a revelation.

The human face is not one thing, nor does it remain constantly the same. It is as varied as the face of nature itself. The light and shade upon it change the expression with every change and a slight alteration of position almost makes a different person.

The expression therefore is the great difficulty in portraiture. It has been said "that the imitation of external and visible form is only correct or nearly perfect when the information of the eye and direction of the head are aided and confirmed by the previous knowledge and actual feeling of character of the object represented."

[TO BE CONCLUDED: ILLUSTRATED.]

MINUTES OF THE PHOTOGRAPHIC SOCIETY OF PHILADELPHIA.

A stated meeting of the Society was held on Wednesday evening, December 14, 1898, the President Robert S. Redfield in the chair.

The monthly report of the Board of Directors was presented, and is appended hereto. The Board also transmitted a report of a special committee appointed to organize a Technical Committee to take the place of the former Committee on Science and Art, and this report, which has been approved by the Directors, is also appended hereto.

Applications for membership were received and referred as follows:

Harold E. Dunne, Washington Lane, Germantown, Hahnemann Medical College. Proposed by L. W. Barringer, Jr.

Miss Elizabeth Wilson Fisher, 1502 Pine Street. Proposed by George W. Hewitt.

Manuel A. T. Gillbee, 1019 Forty-seventh and 819-21 Filbert Street. Proposed by Charles R. Pancoast.

Miss E. W. Lowber, 2045 Locust Street. Proposed by J. Somers Smith, Jr.

William James Skeen, 1926 Sansom and 211 S. Sixth Street. Proposed by W. S. Clow.

Ellen W. Stokes, (Mrs. T. P. C.) Proposed by J. Somers Smith, Jr.

H. B. Weymer, 766 N. Forty-first and 15th & Market Streets. Proposed by J. W. Allison and W. C. Stevenson, Jr.

John Struthers, 223 S. Sixteenth Street. Proposed by John C. Browne, F. W. Geisse and Alex. Hemsley.

Mr. John C. Browne called the attention of the Society to a case of X-Ray poisoning, in which the victim was a physician in one of the city hospitals. The apparatus had been in use for many months, and this is the first time any report of ill effects of the rays had been made.

Dr. Mitchell said there had been a number of reports in the Medical Journals of similar accidents, but in no case did the poisoning appear to be so severe as in the case in question, which seems to be an acute inflammation of the skin.

Mr. Redfield asked why it was that the surgeon and not the patient was harmed.

Dr. Mitchell replied that it was usual to employ an aluminum screen to protect the patient.

Dr. Sharp said that in injuries of this sort there seemed to be some question of individual idiosyncrasy, some persons being more liable to X-Ray burns than others.

Mr. Leeds said that the peculiar feature of the case referred to by Mr. Browne, was that the burns appeared so soon. As a rule they do not develop until ten days or two weeks after the exposure to the rays.

Mr. William H. Rau, director of the Lantern Slide Interchange, submitted the following report:

I beg to report that the return of slides from the members for the interchange has been smaller than usual, only ten contributing fifty slides in all. Of these, forty were selected by our Lantern Committee and sent to the In-

terchange, since which time we have been notified that we might send ten more. These were supplied by two members who generously helped out by contributing, making up the full fifty. I do not think the collection is nearly up to the standard usually sent by the Society.

The members contributing are as follows: Mr. W. P. Stokes, Mr. F. C. Streeper, Mr. S. S. Tatnall, Mr. Henry Troth, Mr. Edmund Stirling, Miss Vaux, Mr. Geo. Vaux, Jr., Mr. William S. Vaux, Jr., Mr. Adamson, Mr. Roop.

W. H. RAU.

Mr. Stirling moved the adoption of the following resolutions:

WHEREAS, The Philadelphia Photographic Salon, recently held under the joint management of the Pennsylvania Academy of the Fine Arts and this Society has been an unqualified success, demonstrating in a most conclusive manner the capabilities of photography as a means of artistic expression, and

WHEREAS, An opportunity now seems before us for establishing permanently on a most desirable foundation, an American Exhibition, devoted exclusively to the art side of photography and holding equal rank with the most important of those held annually abroad, and

WHEREAS, It is eminently proper that such an exhibition should be held in Philadelphia and under the management of the two oldest organizations in their respective lines in America, therefore

Resolved, That the Secretary be directed to convey to the officers of the Pennsylvania Academy of the Fine Arts, an expression of our appreciation of their cordial co-operation with our committee in all efforts toward the success of the recent Salon, and to express our desire and hope that the Salon may be repeated during the autumn of 1899, on the same general plan and under the same terms of agreement between the two organizations as before.

Resolved, That a copy of these resolutions be forwarded to the Secretary of the Academy, with a request that we be advised as to any action they may take in the matter.

Resolved, That in the event of favorable action on the part of the Academy of the Fine Arts, the Board of Directors be hereby authorized to make such arrangements as may be necessary for repeating the Salon during the autumn of 1899.

Mr. John C. Browne seconded the resolutions, and after a brief discussion in which Dr. Mitchell, Mr. Frank S. Lewis and others took part they were adopted unanimously.

Mr. Walter P. Stokes read a review of the pictures shown in the Annual Members Exhibition prepared by Mr. Herbert A. North, whose thoughtful and discriminating criticism was greatly appreciated.

On motion of Dr. Mitchell the thanks of the Society were extended to Mr. North.

Mr. Samuel A. Tatnall read a paper upon the subject; "The Ray Filter," and exhibited the result of experiments made with different strengths of bichromate solution and also a home-made filter.

Mr. Troth asked if the bichromate had any effect upon paraffin wax.

Mr. Horace McFarland said that he used wax in his filters and that they

were always leaking and evaporating. One trouble he had with Ray Filters was that the true values of white and yellow were not preserved.

Mr. Troth said that in most cases he preferred to use slow iso chromatic plates without any screen at all.

Mr. Ives in reply to a question as to the value of bi chromate of potassium for use in Ray Filters said that it has the advantage, that the absorption is progressive from the violet end of the spectrum, and that if the sole object is to cut out the violet end of the spectrum he knew of nothing more effective. He had recommended its use nineteen or twenty years ago. He said it was possible however to obtain as good results with collodion films on glass stained with suitable dyes and that the screens so made did not deteriorate and were easier to use.

Dr. Mitchell suggested that glycerine might be made use of instead of water in the cell form of filters. Dr. Sharp said the difficulty would be to keep the glycerine in the cells as no cement would hold it.

Mr. Walter P. Stokes asked for Mr. Troth's opinion as to the utility of color screens in landscape work. Mr. Troth said that he seldom used a screen in landscapes.

Mr. William S. Vaux, Jr., said that in photographing mountains a color screen was indispensable as it brings out the contrast between snow covered mountains and the sky.

Upon motion of Dr. Sharp, the thanks of the Society were extended to Mr. Tatnall, for his valuable paper.

Mr. J. Horace McFarland then read an interesting and practical paper upon the subject of "Back Grounds, Mounts and Frames," for which the cordial thanks of the Society were extended. Upon motion of Mr. Troth, Adjourned.

EDMUND STIRLING, *Secretary*.

REPORT OF BOARD OF DIRECTORS.

PHILADELPHIA, Dec. 14, 1898.

To the Photographic Society of Philadelphia :

Your Board of Directors has to report that the following have been elected active members of the Society :

Dr. John Welsh Croskey,
Miss Marie P. Megargee,
Percival A. Mitchell,
C. W. Roepper,
Miss Elizabeth C. White.

Messrs. Frederic E. Ives, W. N. Jennings, Frank M. Sawyer, have been transferred from the absent to the active roll. Dr. Caspar W. Miller has become a life member. Miss M. Louise Wood has been placed on the absent roll, and Messrs. Charles M. Taylor, Jr., and Ogden D. Wilkinson have resigned their active membership.

Orders have been taken for the perfection of the system of safe guards against overflows from sinks in the Dark Room, and when the changes are completed it is believed that the danger of damage will be reduced to the minimum. Such safe guards, however, are of little use without the exercise of proper care and your Board asks the co-operation of members in making these effective.

At the Members' Meeting, Nov. 23, 1898, Interchange Slides from Passaic, Frankford, and Topeka Clubs were shown as well as a few brought by members.

Mr. Joseph C. Roop gave at the Visitors' Meeting, Dec. 7, 1898, the photographic results of a trip to Bermuda and the West Indies, in the early part of the present year. The slides were of great beauty and the attendance of the members and guests was larger than at any previous meeting of the season.

The Annual Members' Exhibition is now on the walls, and reflects great credit upon those who have contributed.

The large increase in the number of exhibits and of the members represented is especially gratifying and establishes a standard which we hope will stimulate the Society to even further efforts in the future.

ROB'T S. REDFIELD, *President*.

EDMUND STIRLING, *Secretary*.

PHOTOGRAPHIC SOCIETY OF PHILADELPHIA.

Dec. 12, 1898.

MR. EDMUND STIRLING :

Dear Sir :—I beg to submit to the Board of Directors of the Society the following Report on behalf of the proposed Technical Committee :

On the evening of Nov. 30th, Mr. William S. Vaux, Jr., and myself met in accordance with the wishes of the Board, to organize a committee for the purpose of considering and reporting upon such technical matters as might come to its attention.

By our invitation Mr. Alex. Hemsley was also present.

The following action was taken subject to the approval of the Board :

1. The name of the present body to be the Technical Committee of the Photographic Society of Philadelphia.

2. At present it is to consist of Alexander Hemsley, Wm. S. Vaux, Jr., and Caspar W. Miller, the latter being chairman.

It is hoped, however, that in the future, if the utility of the Committee be established, more members will be found who shall be willing to aid in its work.

3. As its first duty the Committee proposes to establish a question box in which members may deposit questions which the Committee will answer to the best of its ability, at the stated meetings of the Society.

It is believed that this feature may be the means of benefiting some of our members who have recently taken up photography and at the same time prove generally interesting from the discussion thereby provoked at the meetings.

4. It is also proposed to send letters to the various manufacturers requesting them to submit to the Committee any new discoveries or products. Through the reports of the Committee the manufacturers will be assured free advertisement to the members of the Society while the latter will be kept posted as to the newest developer, papers, and other commercial products which have grown to such importance in our art.

The Committee will undertake a monthly review of the magazines including those in both French and German. Very truly yours,

CASPAR W. MILLER.

EDITORIAL NOTES.

The Kromskop.—Very little has been heard of Mr. Ives' Kromskop color photography in this country, where it originated, but in England where it has been exploited commercially, it has attracted a good deal of attention and is everywhere recognized as the first and only perfect photographic method of color reproduction. It should not be confounded with the so-called three color process for reproduction of objects on paper, which, though of interest as a means of commercial advertisement is wholly inadequate, by reason of the present limitations of the technical methods to convey a true impression of natural colors as presented to the normal vision. Mr. Ives' invention is unique and has never been equaled even by the surprising results of Lippman, which are as yet only of scientific value and wholly unpractical commercially, but Mr. Ives' pictures can be almost handled—so intensely realistic are they that one who sees them for the first time is wholly unprepared for the startling phenomenon—so unlike are they to anything hitherto offered as a solution of color photography. Quite recently the Kromskop has also been introduced into Germany and France, and a late issue of the *Vienna Photographische Blätter*, speaks most enthusiastically of the perfection and importance of the results. The strong prejudice against accepting anything short of a color photograph on paper as color photography, is, we are glad to say, fast dying out, as it is recognized that the Kromskop, wherever it has been brought to the notice of the public, possesses merits which it has been found so far impossible to realize in three-color-prints on paper. Add to the beauty of results achieved, the fact that Kromskopy is perfectly practical commercially as a means of advertising, as an instrument in educational and lecture courses, as an adjunct to study of art, medicine and natural history, and its importance needs no further demonstration.

Mr. Ives has now returned to America and has taken premises at 1324 Chestnut Street in this city, where the manufactory of the Kromskop will shortly be inaugurated and where its results will soon be presented to all.

The Death of Dr. Hermann W. Vogel is announced. He was one of the pioneers in orthochromatic photography, and for many years the able editor of *Photographische Mittheilungen*, one of the

leading German photographic journals. At the time of his death he occupied the chair of Director of the Technical High School at Charlottenburg. He has enriched photographic literature with many communications and is also author of several valuable books on photography.

The Development of the Latent Image is the latest publication of the Bibliotheque Photographique, of Gauthier, Villars, Paris. This book, like so many other excellent books issued by this publisher, is of special interest and value, as it incorporates the recent investigations of M. M. Lumière and Seyewetz. The nature of the latent image is not so much dwelled upon as the behavior of the developers in evolving the latent image.

The researches into the nature and action of these agents is elaborate and exhaustive and withal very concisely conveyed.

Wilson's Photographic Mosaics for 1899, has more than the usual store of good papers on matters of photographic interest from the pens of writers who are well-known for their contributions to the art side as well as the scientific aspect of photography. Profusely illustrated.

The Thos. H. McCollin Co. occupying the quarters of the old firm at 1030 Arch Street, has sent quite a number of charming prints on their blue paper. The color is beautiful and the white portions of the pictures clear and bright. Mr. McCollin has given much attention to perfecting the blue print process and has made use of all the recent means of increasing the sensitiveness of the paper so that now even in dull weather, prints may be had without great delay. Blue prints are often capable of making most charming effects and it is strange that with the new departure in photographic printing, amateurs after novelties should not make use of this process for embodying their artistic conceptions. There are certain subjects specially adapted to it; we have seen prints in blue which would have adorned any photographic salon.

Mr. John Carbutt, is, we are told, about to introduce a bromide paper on the market. We await further information but anticipate something excellent in this line from the pioneer in gelatine bromide commodities.

Williams, Brown & Earle, 918 Chestnut St., have introduced a novelty in the shape of an electric flash lamp. It is called the Capitol

Electric Flash Lamp. Many attempts have been made to produce a practicable and at the same time perfectly safe electric lamp for exploding flash powders, but this for neatness, efficiency, compactness, safety and beauty tops the climax.

It is safe because it entirely does away with flame. The latent force to ignite the powder is called into requisition only at the instant it is needed and there is no danger from draughts of wind of premature explosions, which if they do not seriously burn the operator do frequently ruin the plate before things are ready for exposure.

We have had considerable experience in flash work and hail with pleasure this convenient and above all, safe method against officious meddling. The push button is provided with a cap, which looks like the business button which lies concealed under it, known only to the operator, so that there is no danger of the flash before the time.

Mr. William H. Rau, 1324 Chestnut Street, Philadelphia, has added several new lantern lectures to his already large list of subjects. The latest are "Descriptive Readings," accompanied with lantern slides illustrative of the Spanish-American war, Cuba, Porto Rico, the Philippine Islands, &c. These lectures are excellent reading, full of interest on the current subjects of the day and the lantern slides portray in a graphic manner the scenes, engagements and events of this world engaging war. Mr. Rau has also put upon the market illustrations of Dr. Wier Mitchell's popular book, "Hugh Wynne," reproduced from the original drawings by permission of the publishers of the book, and as everyone knows the superiority of reproductions of originals over copies, the beauty of these slides goes without saying.

Another popular work "Quo Vadis," is also illustrated, from original drawings, by the same house. Lantern lecturers and others interested in exhibition work with the lantern should keep themselves acquainted with Mr. Rau's publications.

Picture Taking and Picture Making.—The Kodak Press has issued a little book with the above mentioned title, which though not designed to cover the whole field of photographic manipulation, does, however, give copious yet concise instruction by which the amateur may be directed by the shortest cuts in the broad road of success in photography. The beginner is gradually conducted from exposure to the evolution of the perfect prints, and

all the pitfalls in practice are pointed out and the means of getting over them explained. The excellent products of the Eastman Company receive a full consideration as they justly deserve ; but a full description of the working of the commodities of other houses is entered into—the platinum, carbon gum bichromate, plain paper, etc. The directions, are applicable to the goods of any manufacture, and the amateur may profitably use the little manual even if he does not make use of the Eastman Co.'s products.

Photography is like the fabled Briarins with its hundred hands. It stretches out in all directions and in its compass is made accessory to almost every department of art and science. Especially in education has it been of incalculable value, in bringing within the reach of the scholar treasures hitherto accessible only to the wealthy or specially favored.

All scholars cannot have the privilege of art galleries or even the means for providing copies, in the shape of expensive engravings of the works of the masters. The indifferent cuts which used to pass current when we were boys as fac-similes of Raphael's, Da Vinci's or Claude's divine paintings were, although we sought inspiration from them, flat, tame and unprofitable as studies. Photography, the hand maid of art, by her unerring pencil has made it possible now for the poorest village school to have a rich store, for instruction and edification, of the ancient and modern painters ; not imperfect wood cuts full of blurs and splotches, but clean, clear and beautiful photo-engravings, a delight to any one, at a penny a piece.

We have before us the catalogue of the Perry Picture Co., 11 Pleasant Street, Malden, Mass. It has on its cover, we suppose as a sample copy, a beautiful half-tone of Raphaels "Madonna of the Chair," which is almost equal to a fine steel engraving. The list of subjects comprises almost all the world renowned pictures up to the present time and in addition sculpture ancient and modern, American and European art, historical, geographical, biographical, zoological, and in fact every branch which finds a place in education.

Teachers, especially, are not doing justice to themselves or their pupils to neglect this opportunity of securing for a small sum such a rich stock of artistic productions.

QUESTION BOX.

AN apology is made for not answering some of the questions at a time nearer the date of their sending, on account of the temporary suspension of publication of the AMERICAN JOURNAL OF PHOTOGRAPHY.

T. H. C., Frankford, Pa., Sept. 6, 1898.—I have tried the new developer, ortol, and find it possesses all the good qualities advertised, but what is the reason the powder in the box changes color in a short time, and the solution made from such powder is not as energetic as that freshly bought? And what makes a good developing formula?

Ortol, ikonogen, metol, and others of the new developing agents do not seem to keep as well in the powder form as in solution. We have solutions of several of them combined with sulphite of soda more than six months old which have not perceptibly changed in color and by no means in vigor of action.

A good developing formula? We suppose you mean with ortol. Hauff recommends the following:

- | | | | |
|------|------------------------------|------|--------|
| (a.) | Water | 1000 | parts. |
| | Meta bisulphite potassa..... | 7.5 | " |
| | Ortol..... | 15 | " |
| (b.) | Water | 1000 | parts. |
| | Carb. potassa | 120 | " |
| | Sodium sulphite..... | 180 | " |

You may add water if necessary.

A very good general developer is as follows:

- | | | | |
|------|--------------------|-----|---------|
| (a.) | Ikonogen..... | 320 | grains. |
| | Hydroquinone..... | 360 | " |
| | Metol | 40 | " |
| | Water | 64 | ounces. |
| | Sulphite soda..... | 4 | " |
| (b.) | Carb. potassa..... | 40 | ounces. |
| | Sulphite soda..... | 2 | " |
| | Water | 64 | " |

Dissolve first (a) the sulphite of soda in the 64 ounces of water, then add enough sulphuric acid to redden distinctly blue litmus paper. Then add the ikonogen hydroquinone and metol.

(b) Needs no directions.

This developer will be found valuable for general work, except where intensely black and white negatives are wanted. Nothing equals pyro for work demanding contrast.

Eliza H., West Phila., Dec. 16, 1898.—I have not much experience but have hitherto had good fortune in getting bright negatives, however, the other day I was shocked to find one corner of my plate stained a yellow color on coming out of the fixing tray. What is the cause of it?

You probably did not thoroughly wash your plate after development, that corner in especial. Give your plates a fair washing after development especially if you use pyro gallic acid.

M. K. B., Nov. 26, 1898.—Please tell me the best plan to light a head of a little girl in an ordinary room. If I put the child too close to the window one side comes out very bright and the other not at all; and when I place her back some the illumination is satisfactory but the little one (only four years old) cannot sit even five or six seconds without moving, and even with a quick plate I find this too short. What shall I do?

There are many good chapters in the various books on lighting for home portraiture, but as you found, so they recommend a position at some distance from the strong source of light, which requires probably five or six seconds exposure. We suppose you used a reflector, but even then the contrast is apt to be too violent. Why don't you try a flash light?

PHOTOGRAPHERS' ASSOCIATION OF PENNA.

THE Third Annual meeting of the Association will be held at Wilkesbarre, Feb. 15-17. Vice-Pres. J. B. Schriever, informs us that very great preparation have been made to insure the success of the convention. A fine display of work is expected. A lecture is projected by Dr. Griffith, of Detroit, and a talk by Mr. Hemperly, of Philadelphia, entitled: "Dragging over the Ground we have Ploughed."

Demonstrations in posing and lighting will be given according to the old and the new style of illumination and instructions in appropriate development by able workers in the profession.

The social and recreative needs of the members will not be forgotten and plenty of amusement and a warm reception for all who may be present is promised by the local committee.